

REMARKS

This Request for Continued Examination (RCE) is filed in response to the final Office Action dated December 23, 2005.

Claims 1-7, 9-11, 13-17, and 19-26 are pending in the application. Claims 1, 4 and 19 have been amended. New claims 27 and 28 have been added. Claims 1-7, 9-11, 13-17, and 19-28 remain in the application.

Claims 1, 4, and 19 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 2, 3, 5, 6, 7, 9, and 20-26 are also rejected under 35 U.S.C. §112, first paragraph, as being dependent from rejected claims 1, 4, and 19, respectively.

Claims 10, 11, and 13-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Eatwell et al. (U.S. Patent No. 5,481,615) in view of Zacharov et al. (U.S. Patent No. 6,639,989).

Rejection under 35 U.S.C. §112

After reviewing the rejections under 35 U.S.C. §112, first paragraph, Applicant noticed that the pages in the provisional application Serial No. 60/198,927, to which this application claims priority, are numbered differently than the pages in the electronic copy in Applicant's files. Applicant's representative brought this to the attention to Examiner Michalski, who agreed that the page cited as "page 101" in the previous response as support for the feature "isolating a portion of the response signal" recited in amended claim 1 can indeed be found on page 91 in the provisional application.

The Specification has been amended accordingly to include the subject matter disclosed on page 91 of the provisional application. This section refers back to section 3.4 on page 32/33, where a rationale is given for selecting a minimum phase system. Simply stated, if the system is not minimum phase (i.e., if more reflections are included), the equations cannot be inverted to create the filter coefficients, as the inverted equations have poles, making the system unstable.

Applicant thanks the Examiner for pointing to an error in the claim language of claims 1, 4 and 19, which has been addressed by amending the claims. For example, claim now recites the steps of “correlating the electric response signal with the MLS signal to determine an impulse response, determining from the impulse response an anechoic portion of the impulse response between a time of flight signal and a first reflected signal, using the anechoic portion of the impulse response to compute filter coefficients.” The amended claims 1, 4, and 19 now agree with page 10 of the original specification.

In view of the clarification amendments to claims 1, 4, and 19, withdrawal of the rejection of claims 1-7, 9, and 19-26 under 35 U.S.C. §112, first paragraph, is respectfully requested.

Rejection under 35 U.S.C. §103(a)

The rejection of claims 10, 11, and 13-17 under 35 U.S.C. §103(a) as being unpatentable over Eatwell et al. (U.S. Patent No. 5,481,615) in view of Zacharov et al. (U.S. Patent No. 6,639,989) is hereby traversed and reconsideration thereof is respectfully requested in view of remarks set forth below.

The Office Action mailed 7/9/2004 (Paper #7) indicated that claim 8 was allowable over the art of record, which included the Eatwell and Zacharov patents. The Examiner did not at that time raise the question of adequacy of written description, and claim 8 being part of the application as originally filed is considered as satisfying the written description requirement under 35 U.S.C. §112, first paragraph (see MPEP 2163.04). Moreover, the specification states with particularity on page 7, lines 3-4: “Optimization of the ‘closeness of fit’ may include adjusting the length of the MLS signal.” In the response to this Office Action dated 9/30/2004, Applicant amended claim 10 to incorporate the subject matter from allowable claim 8.

Eatwell, col. 4, lines 47-48, mentions adjusting “the filter characteristic,” but does not teach or suggest the use of multiple different MLS signals and/or adjusting the length of an MLS signal, as claimed. This feature is also not taught by Zacharov. Applicant therefore submits that claim 10 is allowable over the art of record. Withdrawal of the rejection of claim 10 over

Eatwell and Zacharov and allowance of claims 10, 11, and 13-17 is therefore respectfully requested.

Newly added claims 27 and 28 further clarify the role of the anechoic response. No new matter has been introduced by the present amendment. Applicant submits that all claims are now in condition of allowance, which action is respectfully requested.

We believe that we have appropriately provided for fees due in connection with this submission. However, if there are any other fees due in connection with the filing of this Response, please charge the fees to our Deposit Account No. 18-1945, under Order No. KHEN-P01-001 from which the undersigned is authorized to draw.

Dated: March 17, 2006

Respectfully submitted,

By 

Wolfgang E. Stutins

Registration No.: 40,256

ROPES & GRAY LLP

One International Place

Boston, Massachusetts 02110-2624

(617) 951-7000

(617) 951-7050 (Fax)

Attorneys/Agents For Applicant